Tegmina reddish-brown, opaque, coriaceous and punctate except for a large triangular area near the apex at the costal margin which is entirely clear; this triangle rests with its base on the coastal margin of the wing and its apex directed upward, it extends halfway to the tip of the posterior process above and extends from near the apical end of the wing for more than one third the distance toward the base; the veins in the reddish opaque part of the tegmen are prominent and black, those in the hyaline triangle are pale and yellowish.

Thorax and undersurface of the body very dark brown or black, legs black, all of the tibiæ foliaceous, tarsi ferruginous.

Length from front of head to tip of tegmina, 6.8 mm.; length from apex of pronotal horn to tips of tegmina, 9 mm.; length of pronotal horn measuring from humeral angles, 4 mm.; width of pronotum between humeral angles, 1.8 mm.

Type: male. Locality: Sao Paulo, Brazil.

This very interesting and grotesque insect resembles *L. gaffa* Fairmaire in the shape and position of the pronotal process, but is quite distinct from that species in the structure of the posterior process. *L. triangulata* should be recognized by the hyaline triangle on the tegmina and the straight posterior process.

NEW GALL MIDGES OR ITONIDIDÆ FROM THE ADIRONDACKS.

By E. P. Felt,

Albany, N. Y.

The species described below were from a fine lot of 648 pinned specimens collected in August and early September, 1917, and generously donated to the New York State Museum by Mr. Howard Notman of Keene Valley and Brooklyn, with the one exception of *Porricondyla johnsoni,* a species characterized in connection with the study of this collection.

An exceptionally large number of non-gall-making forms will be noted, a condition very likely to occur in general collections from heavily wooded areas where an abundance of moist, decaying vegetable débris favors representatives of the more generalized groups.

The midges were collected in nature much as are larger flies and there is really no reason why these minute forms should not be cap-

tured in the open and characterized except that in the case of gall-making species, it is frequently easier to identify the insect through its work and there is no gainsaying the desirability of associating an insect with its gall.

The Adirondack midge fauna is a rich one and still far from being thoroughly explored, though we probably know most of the genera occurring in that section. The following species, in addition to the new forms described below, were taken by Mr. Notman at Keene Valley in late August and early September as follows:

Winnertzia pectinata Felt, Aug. 27.
Asynapta saliciperda Felt, Sept. 4.
Camptomyia æstiva Felt, Aug. 28.
Dirhiza canadensis Felt, Aug. 14.
D. hamata Felt, Aug. 7.
D. multiarticulata Felt, Aug. 29.
Aphidoletes recurvata Felt, Sept. 15.
Lobodiplosis acerina Felt, Aug. 30.
Feltiella emarginata Felt, Sept. 9.
Karschomyia viburni Felt, Aug. 26.
Mycodiplosis carolinæ Felt, Aug. 29.
M. cyanoccoci Felt, Sept. 4.
M. variabilis Felt, Sept. 4.

Tritozyga borealis new species.

A series of this interesting species was taken in early September, the 10th to the 15th, 1917, by Mr. Howard Notman, at Keene Valley. There are structural and colorational characters which appear to separate this form from earlier characterized species, namely *T. sackeni* Felt and *T. fenestra* Felt. Both sexes were captured, though nothing appears to be known concerning the life history of the species.

Male.—Length 1 mm. Antennæ very short, dark brown, composed of nine segments, the second somewhat swollen, subglobose, the third with a length about half its diameter, the fourth with a length one half greater than its diameter, terminal segment compound, tapering and with a length about 3½ times its diameter. Wings with the venation of *T. sackeni*. Claws moderately long, slender, curved, the pulvilli as long as the claws. Genitalia; basal clasp segment moderately long, stout, terminal clasp segment stout and with a length about 2½ times its diameter.

Female.—Length 1 mm. Antennæ short, dark brown, with 11 or 12 segments, the terminal long, tapering and with a length 2½ to 3 times its diameter. Palpi; first segment moderately long, pyriform, the second shorter, with a length about twice its diameter, the third more than twice the length of the second and somewhat dilated. Mesonotum shining dark brown. Scutellum dark reddish brown. Postscutellum a little darker. Abdomen yellowish brown or reddish brown. Wings hyaline, iridescent. Halteres reddish brown. Legs mostly fuscous yellowish. Terminal lobes of ovipositor triarticulate, the last segment orbicular. Type Cecid. 1699.

The coloration of the male is presumably very similar to that of the female. At least no differences were noted prior to the making of the microscopic preparations.

Konisomyia borealis new species.

The female described below was taken by Mr. Howard Notman at Keene Valley, September 14, 1917. It is closely related to *K. fusca* Felt, from which it may be separated by differences in color and size and especially variations in antennal structure.

Female.—Length 1.5 mm. Antennæ hardly extending to the base of the head, sparsely haired, dark brown, probably nine segments, the second somewhat enlarged, the fifth with a length a little greater than its diameter, the terminal segment produced, evidently compound and with a length about three times its diameter. Palpi; first segment irregularly quadrangular, the second a little longer, irregular, the third a little longer and stouter than the second, the fourth one half longer than the third and somewhat dilated. Eyes black. Mesonotum dark reddish brown. Scutellum and postscutellum dark brown. Abdomen dark yellowish brown, darker apically. Wings hyaline and nearly as in *K. fusca* except that the fork of the fourth vein is a little shorter and somewhat broader. Halteres fuscous yellowish. Legs a nearly uniform dark yellowish brown. Claws moderately stout, strongly curved. The pulvilli nearly as long as the claws. Ovipositor short, stout, the lobes triarticulate, the terminal segment broadly rounded and sparsely haired. There is in this species as in *K. fusca* submedian globose appendages ventrally on the eighth abdominal segment. Type C. 1700.

Neptunimyia flavida new species.

This midge was taken August 23, 1917, by Mr. Howard Notman at Keene Valley, N. Y., and is tentatively referred to this genus, though in the type species the third vein joins costa near the distal fourth and the fourth vein is distinct, while in this new form the third vein is well separated from costa, uniting with the margin near the apex of the wing and the third vein is very indistinct. However, antennal characters and the rather thickly haired wings indicate affinities with *Neptunimyia* and the species is therefore tentatively placed in this genus.

Female.—Length 1 mm. Antennæ extending to the third abdominal segment, thickly haired fuscous yellowish, 10 segments, the fifth with a stem a little longer than the somewhat pyriform basal enlargement, which latter has a subbasal whorl of stout setæ, a smaller subapical whorl of similar setæ and

apically long digitate processes arising from circular pores. Terminal segment somewhat produced with a length over twice its diameter and tapering to an irregularly rounded apex. Palpi, basal segment irregular, second segment with a length over twice its diameter, the third as long as the second, more slender, the fourth nearly ½ longer than the third and somewhat dilated. Mesonotum reddish brown. Scutellum brownish yellow. Postscutellum darker. Abdomen mostly fuscous yellowish, fuscous apically. Wings moderately broad, rather thickly haired and with a venation suggesting that of *Joannisia*. Subcosta unites with costa before the basal half; there is a distinct cross vein originating at the distal third of subcosta and the third vein joins the margin at the apex of the wing, fourth vein extremely indistinct and only traces of the fifth vein are to be seen. Halteres and legs fuscous yellowish. Claws moderately long, stout, somewhat irregular. The pulvelli rudimentary. Ovipositor short, triarticulate, the basal two segments irregularly rectangular, the terminal segment broadly oval and sparsely setose. Type Cecid. 1710.

Neocatocha sylvana new species.

The peculiar female described below was taken September 6, 1917, by Mr. Howard Notman at Keene Valley, N. Y. It is easily distinguished from other American forms by the small number of antennal segments.

Female.—Length 2 mm. Antennæ ⅓ the length of the body, dark brown, 10 segments, the fifth with a stem ⅓ the length of the somewhat ovate basal enlargement, the latter with a length ½ greater than its diameter, sparsely and irregularly clothed with moderately short setæ and apically with a series of digitate processes rising from circular pores; terminal segment somewhat reduced and tapering to an obtuse apex. Palpi, first segment irregularly quadrate, the second a little longer and more slender, the third as long as the second and more slender, the fourth twice the length of the third. Mesonotum shiny dark brown. Scutellum and postscutellum shiny reddish brown with a darker transverse band near the middle. Abdomen fuscous yellowish. Wings slightly fuscous, iridescent, the third vein uniting with the margin before the apex of the wing, the fourth vein indistinct and with a relatively short fork. Halteres dark brown. Legs mostly dark reddish brown, the tarsi with a yellowish cast. Claws simple, finely denticulate apically, the pulvilli as long as the claws, the eighth abdominal segment ventrally with submedian ovate organs. The ovipositor short, triarticulate, the terminal lobes narrowly oval and sparsely setose. Type Cecid. 1720.

Joannisia borealis new species.

The small midge described below falls in the series with the terminal clasp segment broadly rounded apically. It is easily separated from *J. neomexicana* Felt, by the decidedly broader terminal clasp

segment. Taken August 30, 1917, by Mr. Howard Notman, at Keene Valley.

Male.—Length .75 mm. Antennæ twice the length of the body, thickly haired, dark brown, with 16 segments. Palpi, the first segment subglobose, the second longer, broadly oval, the third much smaller, broadly oval. Mesonotum shining dark brown. Scutellum and postscutellum yellowish. Abdomen fuscous yellowish, the distal segments darker. Halteres and legs yellowish. Claws slender, strongly curved, the pulvilli greatly reduced. Genitalia: basal clasp segment moderately long, broad, terminal clasp segment irregularly and broadly oval, the apex without visible spines. Type Cecid. 1703.

Campylomyza monticola new species.

The peculiar male was taken August 30, 1917, by Mr. Howard Notman, at Keene Valley, N. Y. It is easily distinguished from other known species by the subapical terminal clasp segment.

Male.—Length .75 mm. Antennæ as long as the body, thickly haired, yellowish brown, ? 16 segments, the 5th with a stem ¾ the length of the subcylindric basal enlargement which latter has a length about twice its diameter, three well-developed crenulate whorls and a rudimentary fourth, terminal segment wanting. Palpi, first segment subglobose, the second a little longer, slender, the third a little shorter than the second and the fourth nearly as long as the third. Mesonotum reddish brown. Scutellum and postscutellum yellowish. Abdomen reddish brown. Wings narrow as in *Joannisia*. Halteres and legs yellowish. Claws moderately long, stout, finely denticulate. Genitalia: basal clasp segment moderately long, stout and with a triangular setose process apically, the terminal clasp segment moderately long, slender, and tapering to a subacute setose apex. Harpes irregularly chitinized and apically with irregularly recurved teeth. Type Cecid. 1741.

Parwinnertzia new genus.

This genus has the typical circumfili of Winnertzia Rond., from which it may be easily separated by the very narrow wings and the absence of the fifth vein, there being only three long veins, and the biarticulate palpi. Type *P. notmani* n. sp.

Parwinnertzia notmani new species.

The remarkable female described below was taken by Mr. Howard Notman July 16, 1917, at Keene Valley, N. Y. Nothing is known concerning its life habits.

Female.—Length 1.5 mm. Antennæ extending to the third abdominal segment, sparsely haired, yellowish brown with twelve and possibly more sessile

segments, the fifth cylindric with a length about 2½ times its diameter, a sparse subbasal whorl of stout setæ and a scattering subapical band of long, more slender setæ. Slender horseshoe-shaped circumfili extend from the basal third of the segment to a little beyond the tip. Palpi: short, slender, the first segment oval, the second with a length four times its diameter, fusiform, slender. Mesonotum dark reddish brown. Scutellum and postscutellum reddish brown. Abdomen mostly fuscous yellowish. Wings unusually narrow, with a length about three times the width, a well marked crossvein as in *Winnertzia,* the third vein uniting with the margin just beyond the apex of the wing, the fifth vein wanting, the sixth well developed and joining the posterior margin at the basal half. Halteres and legs mostly fuscous yellowish. Claws moderately long, stout, slightly curved, the pulvilli rudimentary. Ovipositor nearly as long as the abdomen, the terminal lobes slender, sparsely setose, triarticulate, the basal segment broadly quadrate, the second segment narrow, the third with a length over twice its diameter and tapering to a narrowly rounded apex. Type Cecid. 1704.

Didactylomyia robusta new species.

This midge was taken September 14, 1917, by Mr. Howard Notman, at Keene Valley, N. Y. It is easily distinguished from other males referable to this genus by the somewhat moderate length of the terminal clasp segment.

Male.—Length 1 mm. Antennæ twice the length of the body, rather thickly haired, dark brown, 15 segments, the fifth with a stem ¼ longer than the cylindrical basal enlargement, which latter has a length 2½ times its diameter, terminal segment somewhat produced, with a length over three times its diameter and apically a slender, somewhat capitate process. Palpi, the first segment with a length nearly twice its width, the second ½ longer, swollen distally, the third as long as the second, more slender and the fourth ½ longer than the third. Mesonotum dark reddish brown. Scutellum and postscutellum reddish yellow. Abdomen yellowish brown. Genitalia fuscous. Halteres yellowish transparent. Legs mostly dark brown. Claws moderately stout, strongly curved, unidentate, the pulvilli about half the length of the claws. Genitalia: basal clasp segment moderately stout, short; terminal clasp segment ½ longer than the basal clasp segment, rather stout, tapering and curving gently; dorsal plate long, broad, deeply and triangularly emarginate; ventral plate moderately long, rather deeply and roundly emarginate, the lobes finger-like. Harpes moderately produced, chitinized and roundly truncate distally. Type Cecid. 1727.

Porricondyla johnsoni new species.

The one male was taken August 23 by Professor C. W. Johnson, at Brookline, Mass. It is closely related to *P. pini* Felt and *P. biden-*

tata Felt, it being most easily separated from the latter by the more heavily chitinized and recurved genitalic hooks.

Male.—Length 1.75 mm. Antennæ probably about ½ longer than the body, thickly long haired, brownish and presumably with 16 segments (only 8 were attached to the specimen), the fifth with a stem twice the length of the cylindrical basal enlargement, which latter has a length about twice its diameter. Palpi: the first segment with a length about three times its diameter; the second apparently as long, the third about twice the length of the second, more slender and the fourth about ¼ longer than the third. Mesonotum dark reddish brown. Scutellum pale yellowish Postscutellum pale orange. Abdomen reddish brown. Genitalia yellowish. Venter dark brown. Halteres pale yellowish. Legs a pale yellowish brown. Claws missing. Genitalia: basal clasp segment short, broad, the internal basal angle with a heavy, strongly recurved bidentate chitinized hook, the extreme distal margin thickly clothed with stout setæ; terminal clasp segment moderately long, strongly curved, falcate, the distal portion expanded, obliquely truncate and with the tip produced as a narrowly triangular fleshy lobe; dorsal and ventral plates indistinct in the preparation. Harpes forming a heavy, strongly recurved hook apically. Type Cecid. 1343.

Porricondyla bidentata new species.

The striking midge described below was taken August 26, 1917, by Mr. Howard Notman at Keene Valley, N. Y. It approaches *P. pini* Felt, from which it is most easily distinguished by the more strongly chitinized hooks of the genitalia and especially by the bidentate hook distally and internally on the basal clasp segment.

Male.—Length 2 mm. Antennæ ½ longer than the body, thickly haired, dark brown, the basal segments yellowish, 15 segments, the fifth with a stem 2½ times the length of the cylindrical basal enlargement, which latter has a length 1½ times its diameter, terminal segment produced, with a length four times its diameter, the apex a short cone. Palpi: first segment with a length about three times its diameter, the second a little longer, broader, the third with a length about twice the second and the fourth ¼ longer and more slender than the third. Mesonotum dark yellowish brown, the median area lighter. Scutellum and postscutellum pale yellowish. Abdomen rather thickly haired, dark brown, the enlarged genitalia yellowish. Halteres and legs mostly dark straw, the distal tarsal segments of the middle pair whitish. Claws moderately long, stout, unidentate, the pulvilli as long as the claws. Genitalia: basal clasp segment short, broad, the internal basal angle prolonged in a rather stout, recurved, bidentate hook; terminal clasp segment moderately long, strongly curved, falcate, the distal portion expanded, obliquely truncate and with a chitinized spur at the apex; dorsal plate short, broad, the lobes appar-

ently divided, obliquely truncate and sparsely margined distally with stout setæ; ventral plate moderately long, broad, broadly and roundly emarginate, the lobes short truncate and with a few stout setæ apically. Harpes with strongly chitinized, irregular, recurved hooks apically. Type Cecid. 1723.

Porricondyla spinigera new species.

This midge, falling in the *P. pini Felt* and *P. hamata* Felt series, was collected September 4, 1917, at Keene Valley, N. Y., by Mr. Howard Notman. It may be easily distinguished from its allies by the long, stout spine at the tip of the terminal clasp segment.

Male.—Length 1 mm. Antennæ twice the length of the body, sparsely long-haired, dark brown, 16 segments, the fifth with a stem twice the length of the cylindrical basal enlargement, which latter has a length ½ greater than its diameter, the terminal segment reduced, with a length about 2½ times its diameter and narrowly rounded apically. Palpi: first segment with a length about three times its diameter, the second ½ longer, the third a little longer and more slender than the second, the fourth ½ longer than the third. Mesonotum reddish brown. Scutellum pale yellowish. Postscutellum yellowish. Abdomen sparsely haired, fuscous yellowish, genitalia somewhat darker. Halteres pale yellowish. Legs mostly pale straw. Claws rather slender, strongly curved, unidentate, the pulvilli nearly as long as the claws. Genitalia: basal clasp segment short, stout, the internal distal angles apparently with a long, irregularly curved spine, the tip of which touches its complement on the other side; terminal clasp segment moderately short, stout, thickly haired and tapering to a long stout apically chitinous spine, the latter with a length about ¼ the entire segment; dorsal plate long, broad, deeply and narrowly emarginate, the lobes narrowly rounded and sparsely setose; ventral plate long, moderately broad, broadly and roundly emarginate, the lobes short, broadly rounded and sparsely setose; halteres strongly chitinized irregularly and with a distinct retrose spine apically. Type Cecid. 1734.

Porricondyla tumidosa new species.

This midge was taken August 27, 1917, by Mr. Howard Notman, at Keene Valley, N. Y. It is related to *P. dilatata* Felt, from which it may be separated by the more slender basal enlargements of the antennal segments and the longer apical spurs on the basal clasp segment.

Male.—Length 1.5 mm. Antennæ decidedly longer than the body, thickly long-haired, dark brown, 16 segments, the fifth with a stem ½ longer than the cylindrical basal enlargement, which latter has a length 2¼ times its diameter, terminal clasp segment with a length 2½ times its diameter, thickly haired and tapering to a narrowly rounded apex. Palpi: first segment with a length about

four times its diameter, the second a little longer, stouter, the third a little longer than the second, more slender, the fourth ½ longer than the third, somewhat dilated. Mesonotum shining reddish brown. Scutellum, postscutellum and abdomen mostly pale yellowish. Genitalia: a light fuscous yellowish and thickly haired. Halteres, legs basally and the tarsal segments mostly pale yellowish, the remainder dark straw. Claws moderately long, slender, slightly curved, unidentate, the pulvilli a little shorter than the claws. Genitalia: basal clasp segment short, stout, the internal distal angle with a curved chitinous spine having a length nearly equal to the diameter of the segment; terminal clasp segment swollen, narrowly oval, thickly setose and with a series of short, stout spines apically; dorsal plate moderately long, broad, deeply and triangularly emarginate, the lobes broadly rounded; ventral plate moderately long, broad triangularly emarginate, the lobes short and thickly setose. Harpes strongly chitinized and tapering to a slightly recurved subacute apex. Type Cecid. 1731.

Asynapta borealis new species.

This female was taken August 28, 1917, by Mr. Howard Notman at Keene Valley, N. Y. It is easily distinguished from related species by the small number of subsessile antennal segments.

Female.—Length 1.5 mm. Antennæ nearly as long as the body, thickly short-haired, light fuscous yellowish, 15 segments, the fifth with a stem about ¼ the length of the cylindrical basal enlargement, which latter has a length twice its diameter. The palpi are over half the length of the antennæ, the first segment has a length about three times its diameter, the second is one half longer than the first, somewhat stouter, the third is more than twice the length of the second, strongly flattened and the fourth is about as long as the third and more slender. Mesonotum reddish brown. Scutellum and postscutellum reddish orange. Abdomen reddish brown, yellowish. Ovipositor about the length of the abdomen. Halteres pale yellowish. Legs mostly dark straw, the distal tarsal segments lighter. Claws moderately long, slender, evenly curved, unidentate, the pulvilli as long as the claws. Terminal lobes of the ovipositor narrowly oval and sparsely setose. Type Cecid. 1729.

Asynapta dolens new species.

The midge was taken by Mr. Howard Notman at Keene Valley, N. Y., September 7, 1917. It runs in the key to *A. furcata* Felt, from which it may be easily separated by the only moderately inflated terminal clasp segment, and its distinctly smaller size.

Male.—Length 1.5 mm. Antennæ ½ longer than the body, rather sparsely haired, dark brown, the stems whitish, with at least 13 and probably with 16 segments, the fifth with a stem ½ longer than the cylindrical basal enlarge-

ment, which latter has a length ½ greater than its diameter and bears a moderately thick whorl of long, stout setæ. Palpi: first segment with a length about three times its diameter, the second ½ longer, more slender, the third as long as the second, the fourth ½ longer than the third. Mesonotum dark reddish brown. Scutellum yellowish white. Postscutellum yellowish. Abdomen rather thickly haired, mostly fuscous yellowish, the basal segments and genitalia somewhat fuscous. Halteres whitish transparent. Coxæ and femora basally yellowish, the remainder of the legs mostly pale straw. Claws moderately long, stout, curved, unidentate, the puvilli nearly as long as the claws. Genitalia: basal clasp segment moderately long, stout, terminal clasp segment short, stout; dorsal plate moderately long, deeply and narrowly incised, the lobes narrowly rounded; ventral plate long, broad and broadly rounded. Type Cecid. 1748.

Camptomyia antennata new species.

This midge was taken September 15, 1917, by Mr. Howard Notman at Keene Valley, N. Y. It is related to *C. montana* Felt, from which it is easily separated by the larger number of antennal segments and the more produced stems.

Male.—Length 1.5 mm. Antennæ more than twice the length of the body, sparsely haired, yellowish brown, probably with 22 segments, the fifth with a stem ½ longer than the subcylindrical basal enlargement, which latter has a length ½ greater than its diameter. Palpi: first segment with a length about three times its diameter, the second segment a little longer than the first, the third about twice the length of the second and the fourth a little longer than the third, the latter two more slender than the basal two. Mesonotum dark brown. Scutellum pale yellowish. Postscutellum yellowish brown. Abdomen mostly dark yellowish brown. Halteres yellowish transparent. Legs mostly dark straw, the tarsi a little darker. Claws moderately stout, strongly curved, unidentate, the pulvilli a little longer than the claws. Genitalia: basal clasp segment moderately long, stout; terminal clasp segment short, stout and narrowly rounded and thickly pectinate apically; dorsal plate long, divided, the lobes broad, obliquely truncate; ventral plate long, deeply and narrowly incised, the lobes broad and tapering to a narrowly rounded and sparsely setose apex. Style rather short, irregular and narrowly rounded apically. Type Cecid. 1728.

Camptomyia dentata new species.

This midge was taken September 3, 1917, by Mr. Howard Notman at Keene Valley, N. Y. It is related to *C. montana* Felt, from which it is easily separated by the shorter stems of the flagellate antennal segments and by the markedly different terminal clasp segment.

Male.—Length 1 mm. Antennæ a little longer than the body, thickly haired, fuscous yellowish, probably 21 segments, the fifth with a stem as long as the cylindrical basal enlargement, which latter has a length about ½ greater than its diameter, terminal segment wanting. Palpi: first segment with a length three times its diameter, irregular, the second ½ longer, broader, the third ½ longer than the second, more slender and the fourth a little longer than the third. Mesonotum reddish brown. Scutellum pale yellowish. Postscutellum and abdomen mostly yellowish, genitalia slightly fuscous. Halteres and legs basally pale yellowish, the distal tarsal segments brownish. Claws moderately stout, evenly curved, unidentate, the pulvilli a little shorter than the claws. Genitalia: basal clasp segment moderately long, broad; the terminal clasp segment with a length three times its diameter, roundly swollen distally, internally and subapically with a closely set row of long, stout chitinous teeth; dorsal plate long, broad, deeply and roundly incised, the lobes broad, irregularly truncate and sparsely setose; ventral plate long, broad, very broadly and roundly emarginate, the lobes short and tapering to a narrowly rounded, sparsely setose apex. Type Cecid. 1735.

Camptomyia pectinata new species.

This peculiar male was taken August 26, 1917, at Keene Valley, N. Y., by Mr. Howard Notman. It differs from all its allies by the greatly produced stems of the flagellate antennal segments.

Male.—Length 1.5 mm. Antennæ twice the length of the body, thickly long-haired, dark brown, 20 segments, the fifth with a stem 2½ times the length of the cylindric basal enlargement, which latter has a length ½ greater than its diameter, a sparse basal whorl of short setæ and a thick subapical whorl of much longer, stout setæ. Terminal segment produced tapering and with a length about four times its diameter. Palpi: first segment irregularly quadrate, the second segment with a length over twice its diameter, the third with a length more than twice the second and more slender, the fourth as long as the third, and more slender. Mesonotum dark reddish brown. Scutellum pale yellowish. Postscutellum yellowish. Abdomen thickly haired, fuscous yellowish. Halteres pale basally, fuscous apically. Legs mostly dark straw, whitish basally and with the distal tarsal segments lighter. Claws moderately long, strongly curved, unidentate, the pulvilli about half the length of the claws. Genitalia: basal clasp segment moderately long, stout, terminal clasp segment stout, strongly curved and greatly constricted near the distal fourth; the apex chitinized and margined with numerous stout, closely set spines. Other structures indistinct in the preparation. Type Cecid. 1726.

Holoneurus inflatus new species.

This species was taken September 12, 1917, at Keene Valley, N. Y., by Mr. Howard Notman. It appears to belong in the series with

sixteen antennal segments, though there is one additional. It is easily separated by the distinctly shorter stem of the fifth antennal segment and by genitalic characters.

Male.—Length 1 mm. Antennæ ½ longer than the body, rather thickly haired, fuscous yellowish, the stems whitish 17 segments, the fifth with a stem as long as the basal enlargement, which latter has a length ¼ greater than its diameter and bears a moderately thick whorl of long setæ. Palpi: first segment with a length nearly three times its diameter, the second nearly twice as long as the first, the third ½ longer than the second, the fourth about as long as the third. Mesonotum dark reddish brown. Scutellum yellowish white. Postscutellum darker. Abdomen thickly haired, yellowish, genitalia fuscous yellowish. Halteres whitish transparent. Coxæ pale yellowish. Legs mostly pale straw. Claws moderately long, curved, unidentate, the pulvilli nearly as long as the claws. Genitalia: basal clasp segment moderately long, stout; terminal clasp segment short, narrowly and irregularly oval; dorsal plate long, deeply and triangularly incised, the lobes broadly rounded; ventral plate moderately long, divided, tapering and narrowly rounded apically. Type Cecid. 1755.

Dicrodiplosis insolens new species.

This peculiar species was taken by Mr. Howard Notman August 12, 1917, at Keene Valley. It is tentatively referred to this genus and is remarkable among female Itonididinariæ on account of the greatly produced circumfili.

Female.—Length 1.75 mm. Antennæ about as long as the body, sparsely haired, dark brown, with at least 13 and presumably 14 segments, the fifth with a stem ¾ of the length of the cylindrical basal enlargement, which latter has a length about three times its diameter, is distinctly and broadly constricted near the middle and has well developed, irregular circumfili basally and apically, the loops with a length about equal to the diameter of the enlargement, there even being a pronounced slackness or bowing of the longitudinal fili connecting the basal and distal circumfili, terminal segment wanting. Palpi: first segment irregular, globose, the second with a length over twice its diameter, the third fully ½ longer than the second and the fourth nearly twice the length of the third. Mesonotum dark reddish brown. Scutellum and postscutellum yellowish. Abdomen fuscous yellowish. Halteres yellowish transparent. Coxæ pale yellowish. Legs mostly dark brown, the anterior pair with the third, fourth and fifth tibial segments mostly yellowish, the middle legs with the third tibial segment yellowish and the posterior legs with the distal half of the second tibial segment and the third and fourth segments whitish. Claws rather long, moderately stout, strongly curved, unidentate, the pulvilli about ½ the length of the claws. Ovipositor short, the terminal segment somewhat swollen and

apically a pair of short, tapering, narrowly rounded, thickly setose lobes. Type Cecid. 1763.

Bremia sylvestris new species.

The male described below was taken September 15, 1917, at Keene Valley, N. Y., by Mr. Howard Notman. It is related to *B. borealis* Felt, from which it is most easily separated by the yellowish and dark brown abdomen and the markedly shorter basal portion of the stem.

Male.—Length 1.5 mm. Antennæ twice the length of the body, thickly haired, dark brown, 14 segments, the fifth having stems with a length 3 and 4½ times their diameters respectively. Terminal segment with a length six times its diameter, the distal part of the stem slender and with a length 5 times its diameter. Palpi: indistinct in the preparation. Mesonotum yellowish brown. Scutellum, postscutellum and basal abdominal segments yellowish, the third and following dark brown. Halteres yellowish basally, fuscous apically. Coxæ and femora basally fuscous yellowish, the distal portion of femora and tibiæ dark straw, the tarsi darker. Claws short, stout, strongly curved, the pulvilli rudimentary. Genitalia: basal clasp segment moderately short, stout, terminal clasp segment rather long, stout; dorsal plate long, broad, divided, the lobes tapering to a narrowly rounded apex, thickly clothed with short setæ; ventral plate moderately long, broad, deeply and triangularly emarginate, the rather broad lobes narrowly rounded. Style moderately short, stout. Type Cecid. 1746.

Lobodiplosis borealis new species.

This interesting male was taken at Keene Valley, N. Y., September 4, 1917, by Mr. Howard Notman. It is easily distinguished from *L. acerina* Felt by the subapical position of the broadly rounded lobe on the basal clasp segment.

Male.—Length .9 mm. Antennæ twice the length of the body, thickly haired, reddish brown, 14 segments, the fifth having stems with a length 2 and 2½ times their diameters respectively. Terminal segment produced, the basal portion of the stem with a length about four times its diameter, the distal part somewhat produced and irregularly fusiform. Palpi: first segment irregular, the second a little longer, more slender, the third a little longer than the second and the fourth a little longer and more slender than the third. Mesonotum dark reddish brown. Scutellum fuscous yellowish. Postscutellum darker. Abdomen rather thickly haired, dark brown, genitalia yellowish. Halteres whitish transparent basally, slightly fuscous apically. Coxæ fuscous yellowish. Legs mostly dark brown. Genitalia: basal clasp segment rather long, moderately broad and with a roundly quadrate and thickly setose subapical lobe; terminal clasp segment rather short, stout; dorsal plate short, broad, broadly

and roundly emarginate; the lobes divergent and narrowly rounded; ventral plate long, moderately broad, broadly and roundly emarginate, both sparsely setose. Type Cecid. 1753.

Mycodiplosis intermedia new species.

This species was taken by Mr. Howard Notman August 31, 1917, at Keene Valley, N. Y. It is closely related to *M. æstiva* Felt, from which it is easily distinguished by the narrower ventral plate and the distinctly irregularly rounded lobes of the dorsal plate. It is separable from *M. obscura* Felt by the distinct constriction of the basal third of the distal enlargement of the fifth antennal segment and the distinctly broader ventral plate.

Male.—Length 1 mm. Antennæ ½ longer than the body, thickly haired, fuscous yellowish, 14 segments, the fifth having stems with a length 3 and 3½ times their diameters respectively. The distal node with a length 1¾ its diameter and distinctly constricted at the basal third. Palpi: first segment short, irregular, the second more than twice the length of the first, the third a little longer, more slender and the fourth ¼ longer than the third and more slender. Mesonotum yellowish brown. Scutellum and postscutellum fuscous yellowish. Abdomen mostly dark brown, the basal segments and genitalia fuscous yellowish. Halteres and coxæ whitish transparent. The legs mostly light straw. Claws long, strongly curved, slender, the anterior unidentate, the pulvilli about ½ the length of the claws. Genitalia: basal clasp segment moderately long, slender; terminal clasp segment moderately stout; dorsal plate short, deeply and narrowly incised, the lobes broad, irregularly rounded and sparsely setose; ventral plate long, moderately broad, roundly emarginate apically. Type Cecid. 1784.

Mycodiplosis lenis new species.

This species was taken August 13, 1917, at Keene Valley, N. Y., by Mr. Howard Notman. It is closely related to *M. robusta* Felt, from which it is most easily separated by the markedly different color characters, the distinctly less produced internal angles of the lobes of the dorsal plate and the longer stems of the fifth antennal segment.

Male.—Length 1 mm. Antennæ twice the length of the body, thickly haired, fuscous yellowish, 14 segments, the fifth having stems with a length 3 and 3½ times their diameters respectively, the distal enlargement with a length over ½ greater than its diameter and distinctly constricted at the basal third; terminal segment greatly produced, the basal portion of the stem with a length five times its diameter, the distal enlargement cylindric, with a length four times its diameter and apically with a long finger-like process. Palpi: first

segment short, irregular, the second more than twice the length of the first, somewhat dilated, the third a little longer, more slender and the fourth still longer and somewhat dilated apically. Mesonotum reddish brown. Scutellum and postscutellum fuscous yellowish. Abdomen thickly haired, mostly yellowish brown, yellowish basally, genitalia yellowish orange, slightly fuscous apically. Halteres yellowish transparent, fuscous subapically. Coxæ pale yellowish. Legs mostly dark straw. Claws long, slender, strongly curved, the pulvilli about ½ the length of the claws. Genitalia: basal clasp segment moderately stout; terminal clasp segment rather long, dorsal plate broad, deeply and narrowly emarginate, the lobes roundly and obliquely emarginate, the distal angles distinctly produced, the internal angles slight; dorsal plate long, broad, slightly constricted subapically, roundly emarginate distally. Type Cecid. 1783.

Hyperdiplosis insolens new species.

The male was taken by Mr. Howard Notman August 26, 1917, at Keene Valley, N. Y., and is provisionally referred to this genus. It is easily recognized by the extremely short basal portion of the stem of the fifth antennal segment, the triangular emargination of the dorsal plate and the somewhat heavily chitinized harpes suggesting the condition in *Lobodiplosis*. It falls in the series with *H. eupatorii* Felt and *H. americana* Felt.

Male.—Length .75 mm. Antennæ twice the length of the body, thickly haired, yellowish brown, 14 segments, the fifth having stems with a length ½ and twice their diameters respectively, the distal enlargement subcylindrical, with a length about twice its diameter, the circumfili moderately long, the loops having a length about equal to the diameter of the enlargement; terminal segment, basal portion of the stem with a length twice its diameter, the distal enlargement with a length three times its diameter and apically a long, irregular finger-like process. Palpi: first segment with a length about twice its diameter, the second nearly twice the length of the first, the third a little longer than the second and the fourth a little longer than the third. Mesonotum dark reddish brown. Scutellum pale yellowish. Postscutellum darker. Abdomen brownish yellow, genitalia fuscous yellowish. Halteres yellowish transparent. Legs mostly dark straw. Claws moderately long, curved at nearly right angles, the pulvilli less than half the length of the claws. Genitalia: basal clasp segment long, stout, and apically with a short, spined lobe suggestive of that in *Lobodiplosis*; terminal clasp segment moderately long, stout, dorsal plate moderately long, broad, deeply and triangularly emarginate, the lobes triangular and sparsely setose; ventral plate shorter, broadly and roundly emarginate, the lobes short, broad and narrowly rounded. Type Cecid. 1769.

Lestodiplosis satiata new species.

This species is an extreme form, placed here, though the prolongation of several dorsal loops of the circumfili suggest a relationship to *Aphidoletes*. The male was collected August 28, 1917, by Mr. Howard Notman at Keene Valley, N. Y. It falls in the key near *L. triangularis* Felt and *L. asclepiæ* Felt, from both of which it is readily distinguished by characters given below.

Male.—Length 1 mm. Antennæ more than twice the length of the body, thickly haired, mostly pale yellowish, the two basal antennal segments and most of the basal enlargements of the others somewhat fuscous; 14 segments, the fifth having stems each with a length 2½ times its diameter; one or more dorsal loops of the circumfili greatly produced and with a length fully twice that of the normal loops; terminal segments produced, the basal portion of the stem with a length about six times its diameter, the distal enlargement subcylindrical, somewhat expanded distally and apically forming an obtuse cone. Palpi: first segment irregular, the second about twice the length of the first, the third a little longer than the second, more slender, the fourth a little longer than the third. Mesonotum dark brown. Scutellum and postscutellum yellowish brown. Abdomen mostly dark brown. Wings rather indistinctly spotted with fuscous, iridescent spots. Halteres whitish transparent. Coxæ and legs mostly dark brown, the distal portion of femora, the distal and basal thirds of tibiæ, the distal half of the second tarsal segment and the third, fourth, and fifth tarsal segments mostly yellowish. Claws rather long, slender, slightly curved, the pulvilli nearly as long as the claws. Genitalia: basal lobe of the somewhat slender basal clasp segment unusually small, dorsal plate short, deeply and narrowly emarginate, the lobes broad, irregularly rounded and setose; dorsal plate moderately long, broad, broadly rounded and thickly setose apically. Type Cecid. 1775.

NOTES AND NEW SPECIES OF BEMBIDIUM.

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In a paper on some coleoptera collected at Cochrane, Ontario (Jour. N. Y. Ent. Soc., Vol. XXVII, p. 92), the writer described a species of *Bembidium* to which he gave the name *B. lengi*. A further study of the descriptions of related species and the collection of more material indicate some points of interest worthy of mention.